#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023839 Address: 333 Burma Road **Date Inspected:** 15-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time: Project Name:** SAS Superstructure **OSM Departure Time: Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** Tian Lei, Liu Fa Wen **CWI Present:** Yes No N/A **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 3

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail components identified as 20TR2-032. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-362.

SMAW welding of complete join penetration welds located on Side Plate component identified as SP3081B-001 for weld no. 034 & 035. Welder is identified as welder no. 058112. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2213-B-U2.

SMAW welding of complete join penetration welds located on Side Plate component identified as SP3071-001 for weld no. 073, 075, 081, & 083. Welder is identified as welder no. 037997. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2213-TC-U4b.

Bay Number 8

# WELDING INSPECTION REPORT

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This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08171. The member(s) is/are identified as OBG Bike Path identified as components BK004A2-064 with the following weld no.(s):

1. BK004A2-064-014, 015, 017, 019, & 020.

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08178. The member(s) is/are identified as OBG Bike Path identified as components BK004-059 with the following weld no.(s):

- 1. BK004A2-059-001, 003, 004, 005, 006, 007, 009, 010, 011, & 012.
- 2. BK004A3-059-019, 020, 032, 033, 043, 044, 058, 059, 021, 022, 030, 031, 045, 046, 056, 057, 002, 003, 007, 010, 005, 009.
- 3. BK004A4-059-006, 007, 021, 022, 032, 033, 047, 048, 058, 059, 073, 074, 004, 005, 019, 020, 030, 031, 045, 046, 056, 057, 071, 072.
- 4. BK004A5-059-0014, 015, 024, 025, 034, 035, 044, 045, 054, 055, 064, 065, 074, 075, 084, 085, 110, 111, 113, 114, 116, 117, 119, 120, 123, 124, 126, 127, 129, 130, 132, 133, 112, 115, 118, 121, 122, 125, 128, 131, 004, 005, 007, 009, 002, 003, 006, 008.
- 5. BK004A6-059-061, 063, 065, 070, 076, 078, 080, 082, 086, 088, 090, 092, 096, 098, 100, 102.
- 6. BK004A8-059-061, 063, 065, 070, 076, 078, 080, 082, 086, 088, 090, 092, 096, 098, 100, 102.
- 7. BK004A6-059-072, 073.
- 8. BK004A8-059-073.

This QA inspector performed MT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no. 08171. The member(s) is/are identified as OBG Bike Path identified as components BK4ASDI-064 & BK4A1-062 with the following weld no.(s):

- 1. BK4ASDI-064-001~004, 022~024, 027.
- 2. BK4A1-062-043.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Pertinent conversations are included in the body of the report.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer